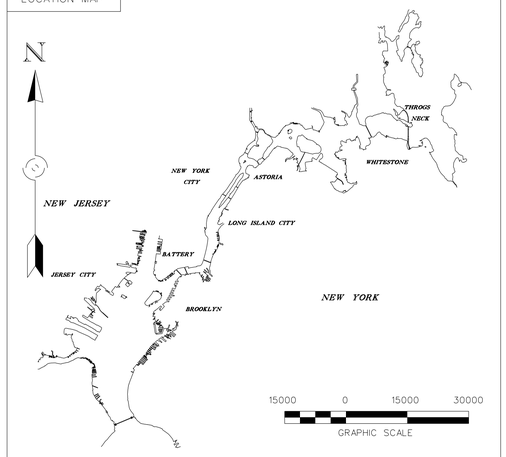
EAST RIVER, N.Y.

BATTERY TO THROGS NECK BRIDGE

CONDITION SURVEY

LOCATION MAP





PROJECT SPECIFIC NOTES:

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NSRS BENCHMARK	
BENCHMARK:	851 8750 TIDAL 7 PID: AB6736
ELEVATION:	11.88' (NAVD 1988)

LOCAL CONTROL DATA	
BENCHMARK: B 348	PID: KU1054
ELEVATION: 14.72'	(NAVD 1988)
BENCHMARK: V 346	PID: KU1060
ELEVATION: 15.58'	(NAVD 1988)
BENCHMARK: E 339	PID: KU1422
ELEVATION: 38.59'	(NAVD 1988)
BENCHMARK: C 346	PID: KU1069
ELEVATION: 65.51'	(NAVD 1988)
BENCHMARK: 851 8526 TIDAL 4	PID: KU0990
ELEVATION: 11.56'	(NAVD 1988)

US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

PR DS/CM
MP DS

DATES OF SURVEY: 4-19 NOVEMBER 2020

REG. NO./FILE NO.:15003

SCALE: ONE INCH = 3000 FEET

FIELD BOOKS: 1987

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

APPROVED: P. KEARNS FIELD OPERATIONS
APPROVED: M. FORTE CHIEF, ENGINEERING TECHNICIAN
APPROVED: P. BHADUR CHIEF, CARTOGRAPHY
APPROVED: J. MRAZ BRANCH CHIEF OF SURVEY
DATE: 16 DECEMBER 2020

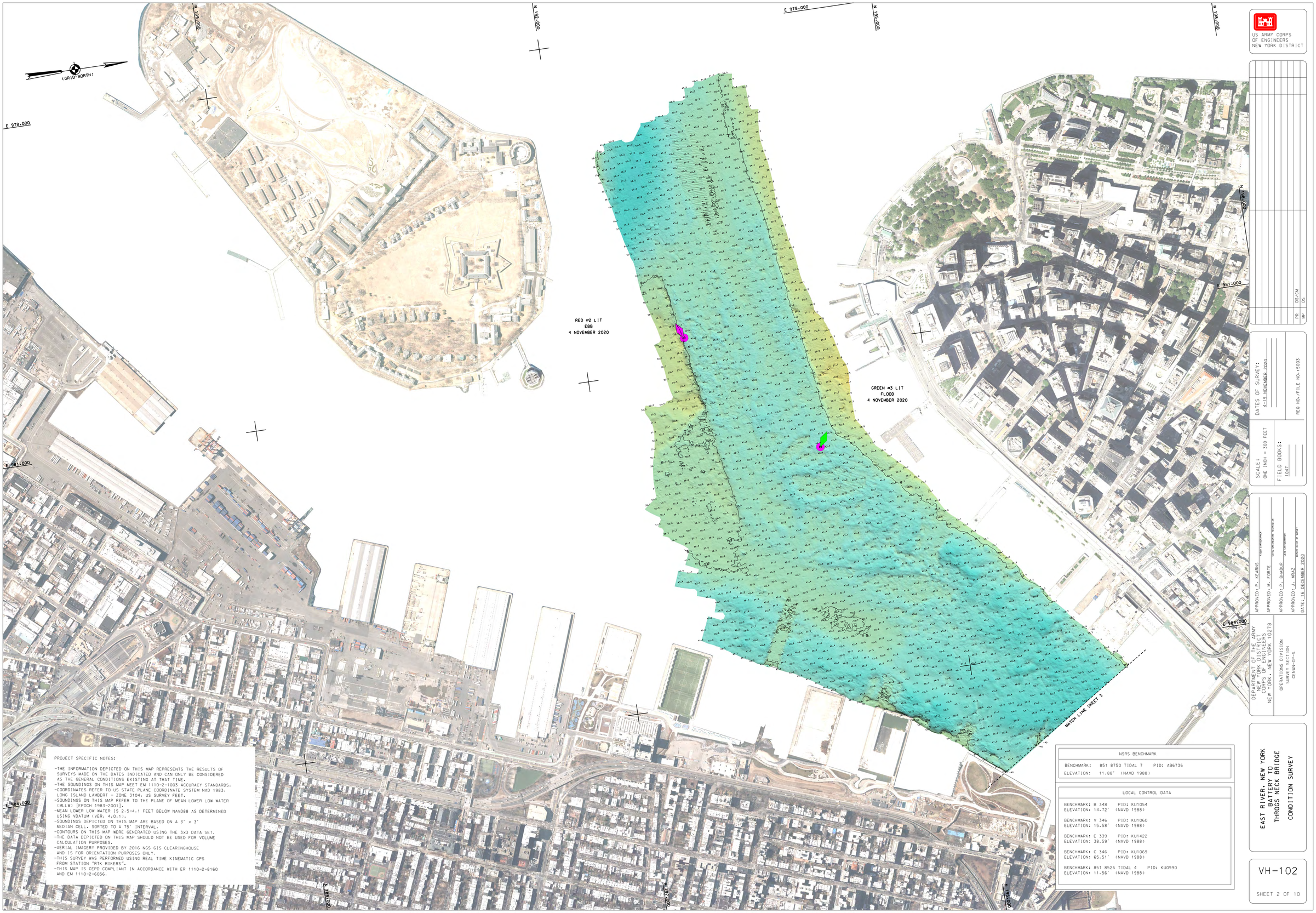
EAST RIVER, NEW YORK
BATTERY TO
THROGS NECK BRIDGE
CONDITION SURVEY

VH-101

SHEET 1 OF 10

CORPS OF ENGINEERS

U. S. ARMY



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NSRS BENCHMARK
BENCHMARK: 851 8750 TIDAL 7 PID: AB6736
ELEVATION: 11.88' (NAVD 1988)

LOCAL CONTROL DATA
BENCHMARK: B 348 PID: KU1054 ELEVATION: 14.72' (NAVD 1988)
BENCHMARK: V 346 PID: KU1060 ELEVATION: 15.58' (NAVD 1988)
BENCHMARK: E 339 PID: KU1422 ELEVATION: 38.59' (NAVD 1988)
BENCHMARK: C 346 PID: KU1069 ELEVATION: 65.51' (NAVD 1988)
BENCHMARK: 851 8526 TIDAL 4 PID: KU0990 ELEVATION: 11.56' (NAVD 1988)

US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

PR DS/CM
WP DS

DATES OF SURVEY:
4-19 NOVEMBER 2020

REQ NO./FILE NO.:15003

SCALE:
ONE INCH = 300 FEET

FIELD BOOKS:
1647

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OPS-S

APPROVED: P. KEARNS — FIELD SURVEYANCE
APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: P. BRADAUR — CHIEF SURVEYANCE
APPROVED: J. MRAZ — CHIEF, CHIEF OF SURVEY
DATE: 16 DECEMBER 2020

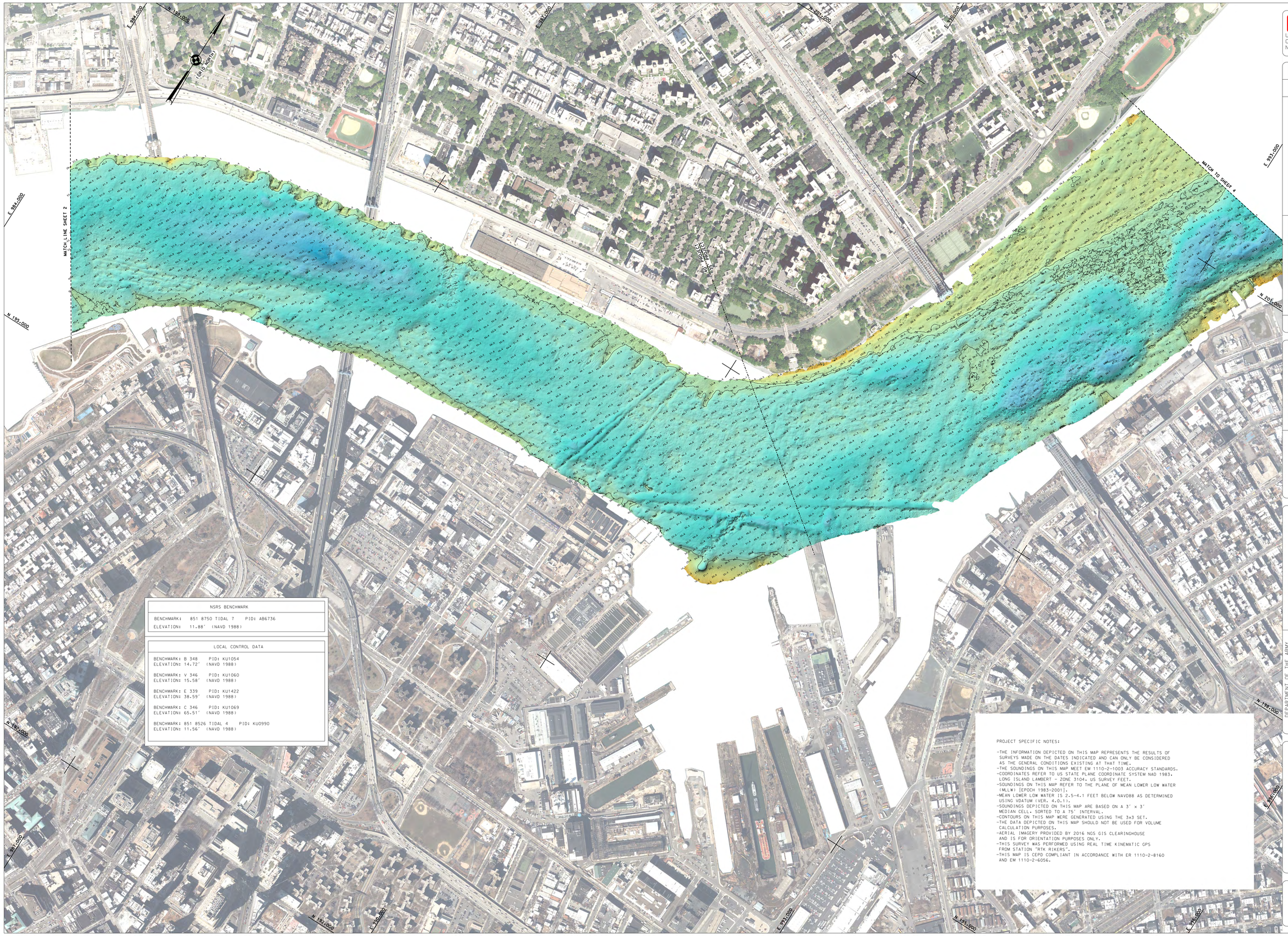
EAST RIVER, NEW YORK
BATTERY TO
THROGS NECK BRIDGE
CONDITION SURVEY

VH-102

SHEET 2 OF 10

CORPS OF ENGINEERS

U. S. ARMY



NSRS BENCHMARK
BENCHMARK: 851 8750 TIDAL 7 PID: AB6736
ELEVATION: 11.88′ (NAVD 1988)

LOCAL CONTROL DATA
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US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

PR OS/CM
WP OS

DATES OF SURVEY:
4-19 NOVEMBER 2020

REQ. NO./FILE NO.:5003

SCALE:
ONE INCH = 300 FEET

FIELD BOOKS:
1647

APPROVED: P. KEARNS — FIELD CARTOGRAPHER
APPROVED: M. FORTE — CHIEF, ENGINEERING TECHNICIAN
APPROVED: P. BHABUR — CHIEF CARTOGRAPHER
APPROVED: J. MRAZ — CHIEF, SURVEY SECTION
DATE: 16 DECEMBER 2020

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OPS-S

EAST RIVER, NEW YORK
BATTERY TO THROGS NECK BRIDGE
CONDITION SURVEY

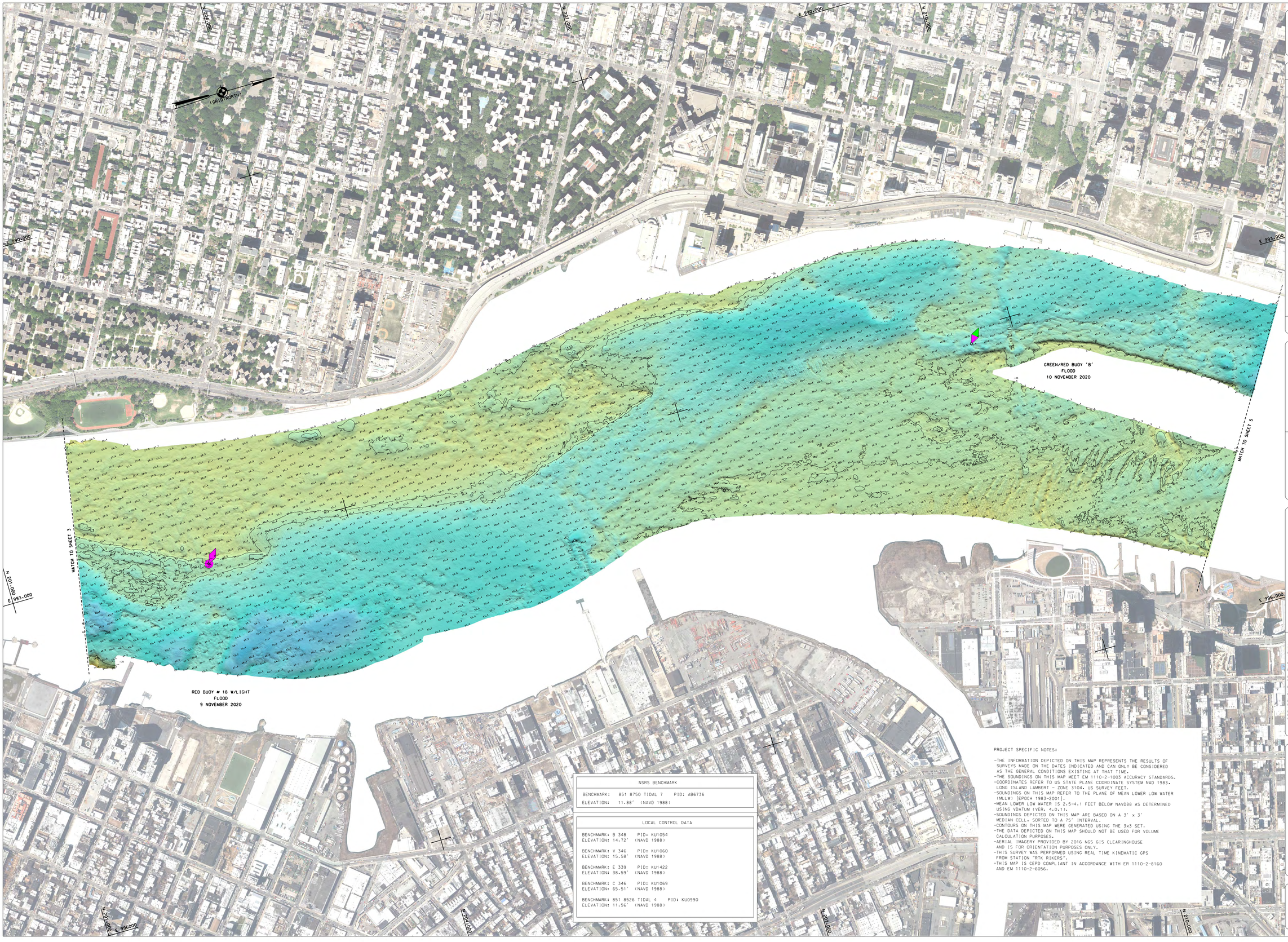
VH-103

SHEET 3 OF 10

REQ. NO./FILE NO.:5003

CORPS OF ENGINEERS

U. S. ARMY



NSRS BENCHMARK	
BENCHMARK: 851 8750 TIDAL 7	PID: AB6736
ELEVATION: 11.88' (NAVD 1988)	

LOCAL CONTROL DATA	
BENCHMARK: B 348	PID: KU1054
ELEVATION: 14.72' (NAVD 1988)	
BENCHMARK: V 346	PID: KU1060
ELEVATION: 15.58' (NAVD 1988)	
BENCHMARK: E 339	PID: KU1422
ELEVATION: 38.59' (NAVD 1988)	
BENCHMARK: C 346	PID: KU1069
ELEVATION: 65.51' (NAVD 1988)	
BENCHMARK: 851 8526 TIDAL 4	PID: KU0990
ELEVATION: 11.56' (NAVD 1988)	

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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PR	DS/CM
MP	DS

DATES OF SURVEY:
4-19 NOVEMBER 2020

RED NO./FILE NO.:5003

SCALE:
ONE INCH = 300 FEET

FIELD BOOKS:
1047

APPROVED: P. KEARNS — FIELD CARTOGRAPHER
APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: P. BHADUR — LEAD CARTOGRAPHER
APPROVED: J. MRAZ — DEPUTY CHIEF OF SURVEY
DATE: 16 DECEMBER 2020

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

EAST RIVER, NEW YORK
BATTERY TO
THROGS NECK BRIDGE
CONDITION SURVEY

VH-104

SHEET 4 OF 10

REQ NO./FILE NO.:5003

CORPS OF ENGINEERS

U. S. ARMY



US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

PR DS/CM
WP DS

DATES OF SURVEY:
4-19 NOVEMBER 2020

REQ NO./FILE NO.:15003

SCALE:
ONE INCH = 300 FEET

FIELD BOOKS:
1&4T

APPROVED: P. KEARNS — FIELD SURVEILLANCE
APPROVED: M. FORTE — CIVIL ENGINEERING TECHNICIAN
APPROVED: F. BHABUK — CHIEF SURVEILLANCE
APPROVED: J. MRAZ — CHIEF, SURVEY OF HARBOR
DATE: 16 DECEMBER 2020

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OPS

NSRS BENCHMARK	
BENCHMARK:	851 8750 TIDAL 7 PID: AB6736
ELEVATION:	11.88' (NAVD 1988)

LOCAL CONTROL DATA	
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ELEVATION: 14.72'	(NAVD 1988)
BENCHMARK: V 346	PID: KU1060
ELEVATION: 15.58'	(NAVD 1988)
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EAST RIVER, NEW YORK
BATTERY TO THROGS NECK BRIDGE
CONDITION SURVEY

VH-105

SHEET 5 OF 10

U. S. ARMY

US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

PR	DS/CM
MP	DS

REQUEST NUMBER/FILE NUMBER:5003

FIELD BOOKS: 1047

SCALE: ONE INCH = 300 FEET

DATES OF SURVEY: 4-19 NOVEMBER 2020

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

APPROVED: P.KEARNS
FIELD CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: P. BHADUR
LEAD CARTOGRAPHER

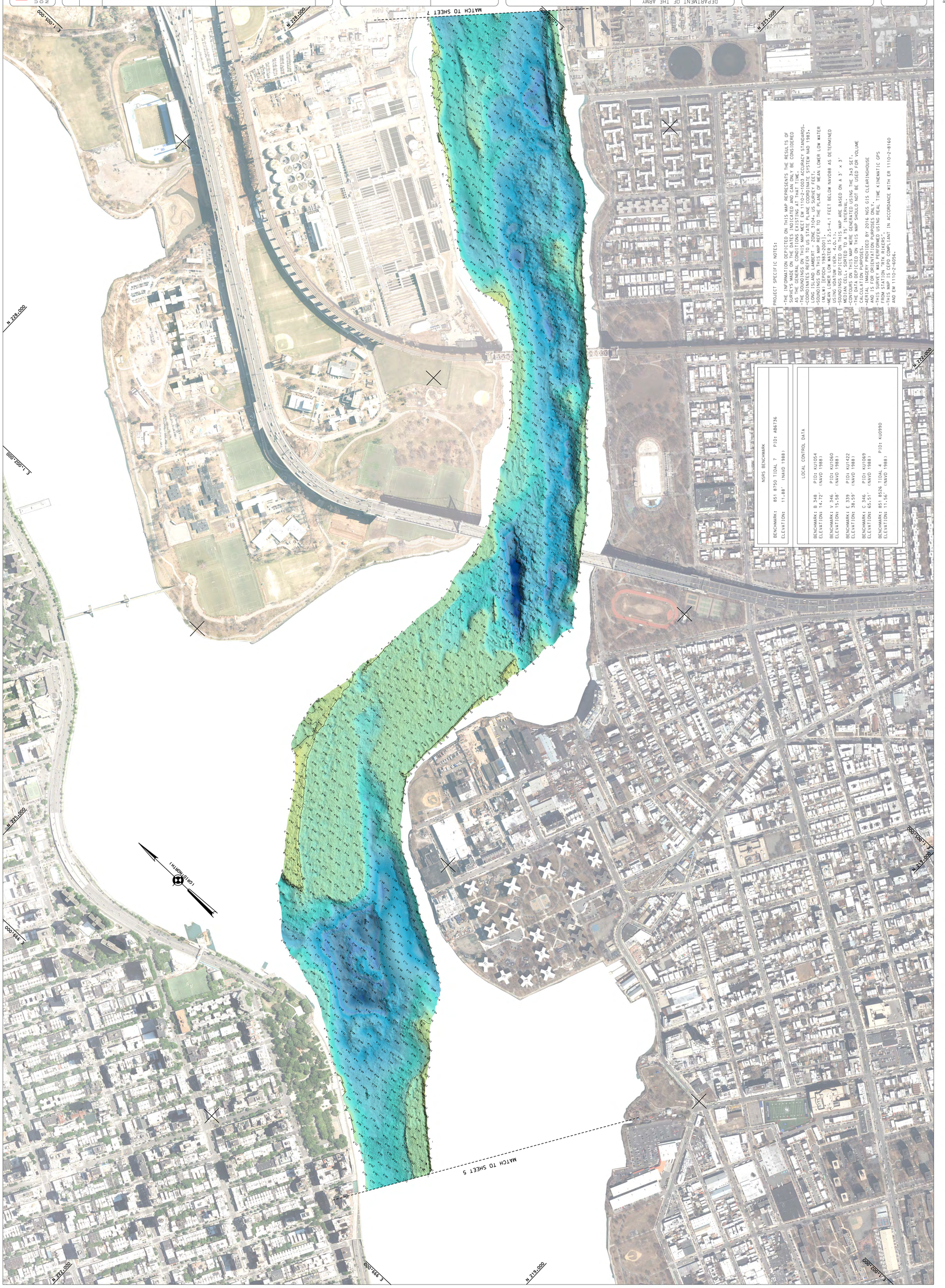
APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 16 DECEMBER 2020

EAST RIVER, NEW YORK
BATTERY TO THROGS NECK BRIDGE
CONDITION SURVEY

VH-106

SHEET 6 OF 10



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NSRS BENCHMARK

BENCHMARK: 851 8750 TIDAL 7 PID: AB6736
ELEVATION: 11.88' (NAVD 1988)

LOCAL CONTROL DATA

BENCHMARK: B 348 PID: KU1054
ELEVATION: 14.72' (NAVD 1988)

BENCHMARK: V 346 PID: KU1060
ELEVATION: 15.58' (NAVD 1988)

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ELEVATION: 65.51' (NAVD 1988)

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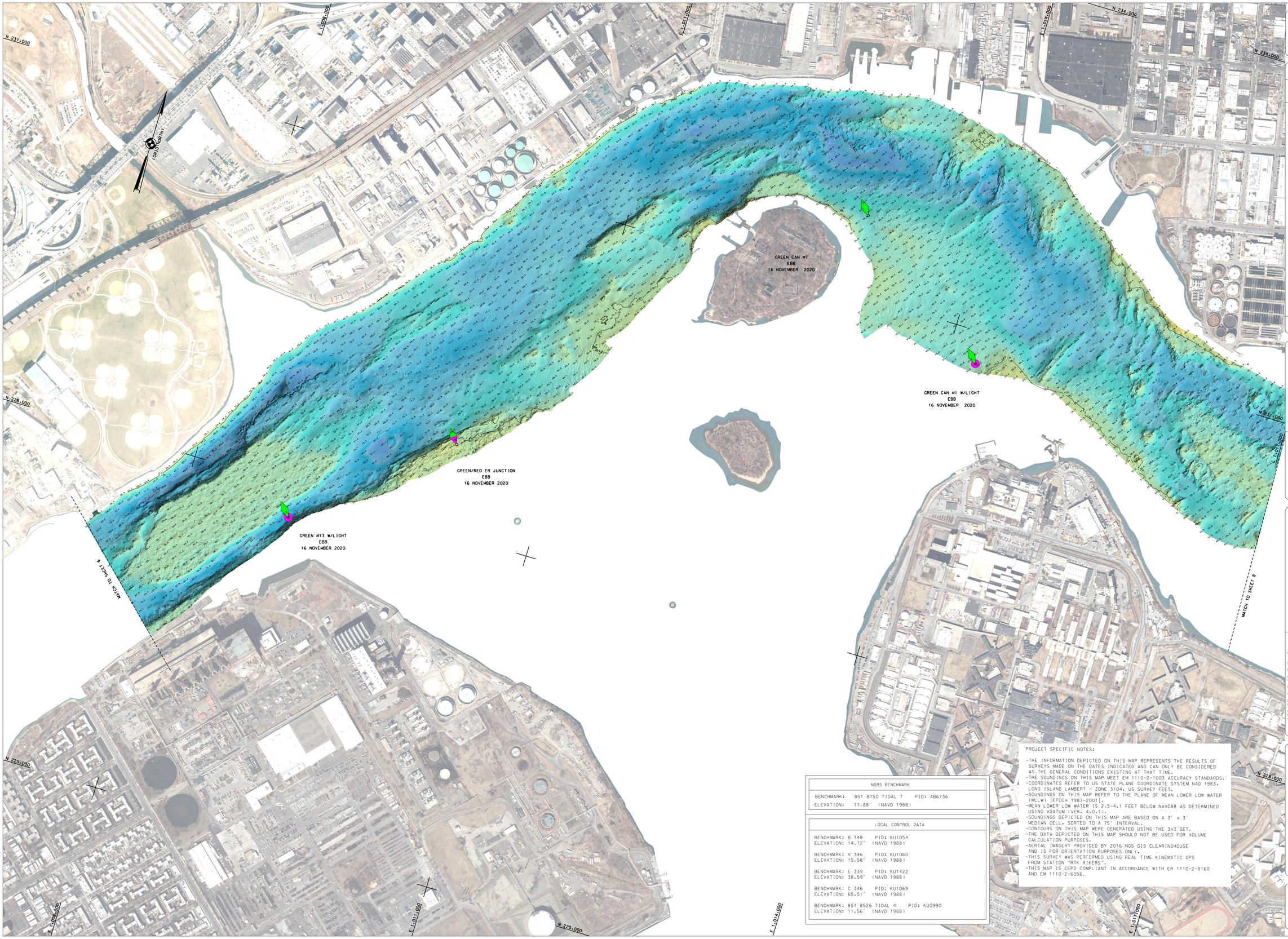
ELEVATION: 11.56' (NAVD 1988)

CORPS OF ENGINEERS

REQ. NO./FILE NO.:5003

CORPS OF ENGINEERS

U. S. ARMY



NSRS BENCHMARK	
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US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PR DS/CM
WP DS

DATES OF SURVEY:
4-19 NOVEMBER 2020

REQ NO./FILE NO.:5003

SCALE:
ONE INCH = 300 FEET

FIELD BOOKS:
1647

APPROVED: P. KEARNS — FIELD SURVEILLANCE
APPROVED: M. FORTE — CHIEF, ENGINEERING TECHNICIAN
APPROVED: P. BRADEUR — CHIEF SURVEILLANCE
APPROVED: J. MRAZ — CHIEF, SHOP & SHEET
DATE: 16 DECEMBER 2020

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CEMAN-OPS

EAST RIVER, NEW YORK
BATTERY TO THROGS NECK BRIDGE
CONDITION SURVEY

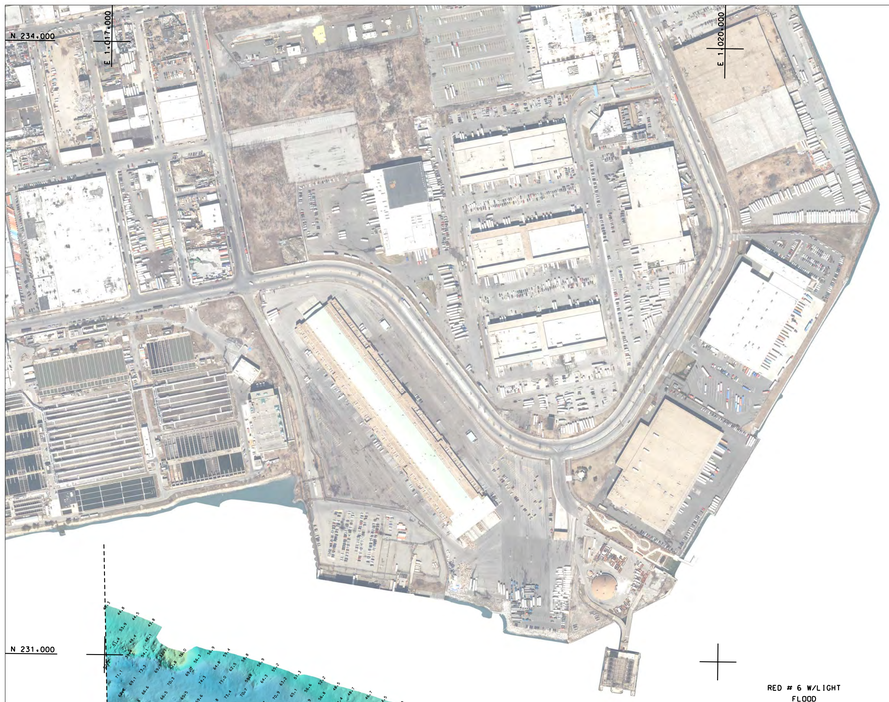
VH-107

SHEET 7 OF 10

REQ NO./FILE NO.:5003

CORPS OF ENGINEERS

U. S. ARMY





(GRID NORTH)

N 234.000

US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

N 231.000

MATCH TO SHEET 7

RED # 6 W/LIGHT
FLOOD
19 NOVEMBER 2020

GREEN # 3 BELL
FLOOD
19 NOVEMBER 2020

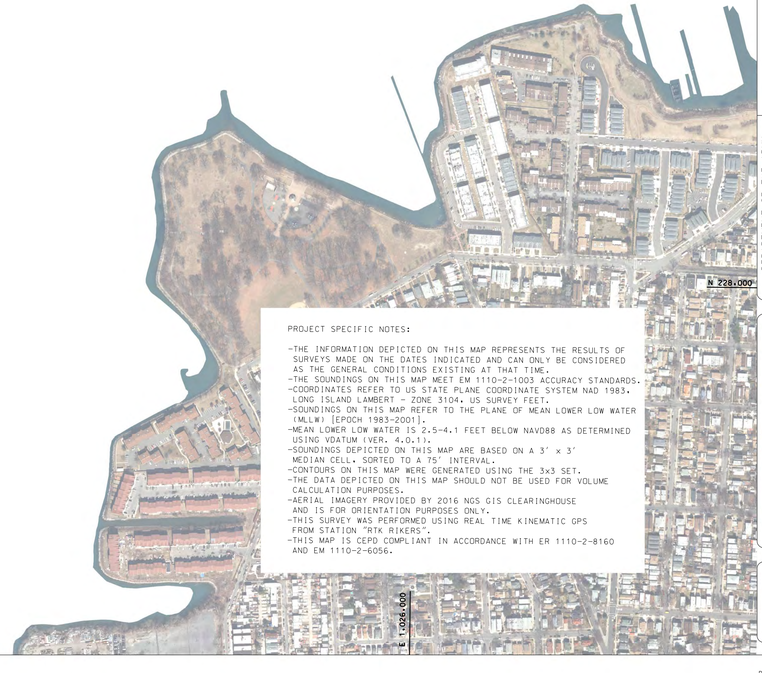
GREEN # 5 W/LIGHT
EBB
19 NOVEMBER 2020

MATCH TO SHEET 9

N 231.000

N 228.000





NSRS BENCHMARK	
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ELEVATION:	11.88' (NAVD 1988)

LOCAL CONTROL DATA	
BENCHMARK: B 348	PID: KU1054
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BENCHMARK: V 346	PID: KU1060
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BENCHMARK: E 339	PID: KU1422
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-THIS MAP IS CEPD COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.

PR OS/CM
WP OS

DATES OF SURVEY:
4-13 NOVEMBER 2020

REQ NO./FILE NO.:15003

SCALE:
ONE INCH = 300 FEET

FIELD BOOKS:
1647

APPROVED: P. KEARNS FIELD SUPERVISOR
APPROVED: M. FORTE CIVIL ENGINEERING TECHNICIAN
APPROVED: F. IBRAHIM CHIEF HYDROGRAPHER
APPROVED: J. MRAZ CHIEF, SECT. OF SURVEY
DATE: 16 DECEMBER 2020

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CEINAN-OP-S

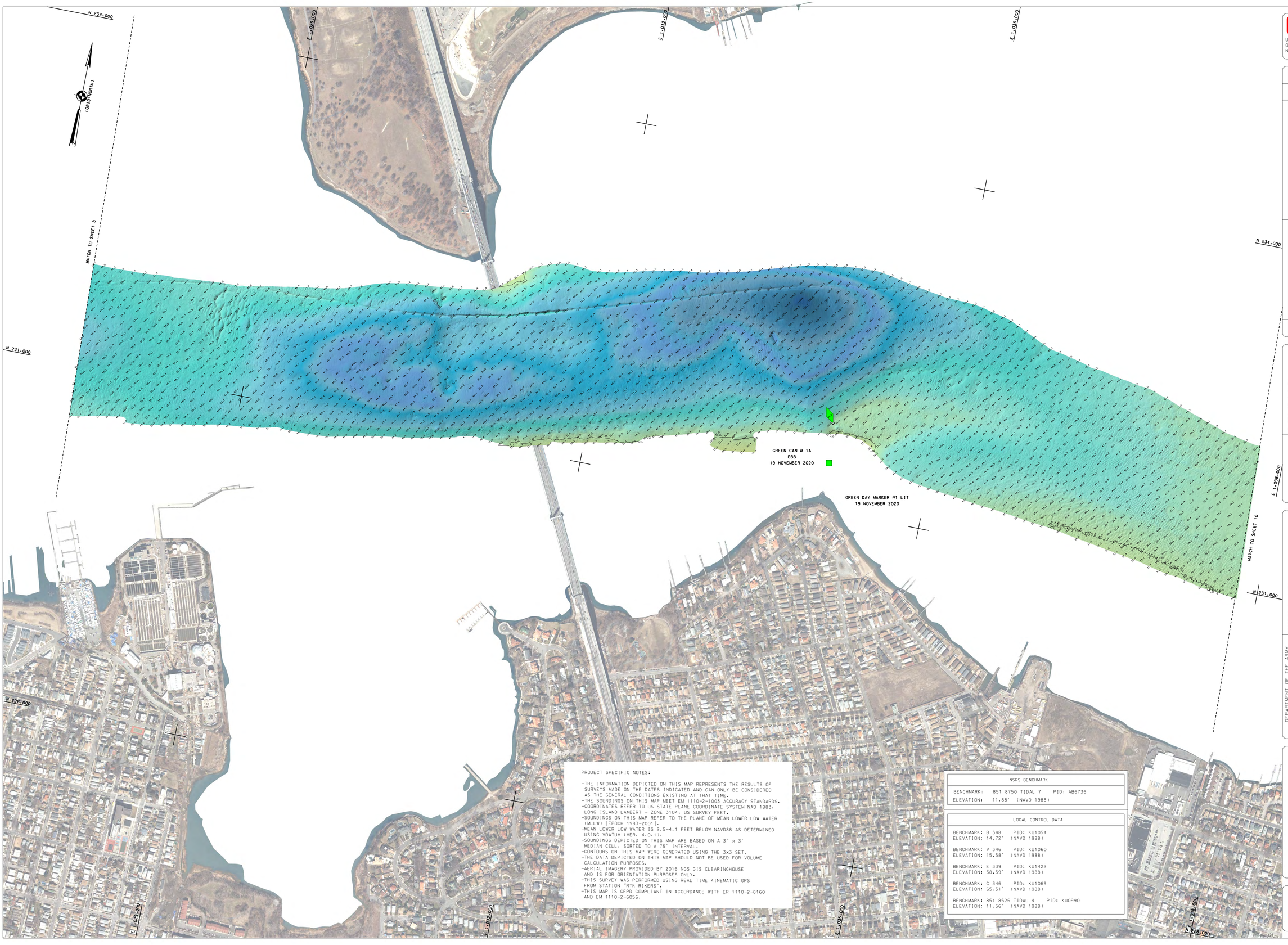
EAST RIVER, NEW YORK
BATTERY TO
THROGS NECK BRIDGE
CONDITION SURVEY

VH-108

SHEET 8 OF 10

CORPS OF ENGINEERS

U. S. ARMY



PROJECT SPECIFIC NOTES:

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- THE SOUNDINGS ON THIS MAP MEET EM 1110-2-1003 ACCURACY STANDARDS.
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- SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
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NSRS BENCHMARK

BENCHMARK: 851 8750 TIDAL 7 PID: AB6736
ELEVATION: 11.88' (NAVD 1988)

LOCAL CONTROL DATA

BENCHMARK: B 348 PID: KU1054
ELEVATION: 14.72' (NAVD 1988)

BENCHMARK: V 346 PID: KU1060
ELEVATION: 15.58' (NAVD 1988)

BENCHMARK: E 339 PID: KU1422
ELEVATION: 38.59' (NAVD 1988)

BENCHMARK: C 346 PID: KU1069
ELEVATION: 65.51' (NAVD 1988)

BENCHMARK: 851 8526 TIDAL 4 PID: KU0990
ELEVATION: 11.56' (NAVD 1988)

US ARMY CORPS OF ENGINEERS
NEW YORK DISTRICT

PR DS/CM
MP DS

DATES OF SURVEY:
4-19 NOVEMBER 2020

REQ NO./FILE NO.:5003

SCALE:
ONE INCH = 300 FEET

FIELD BOOKS:
1047

APPROVED: P. KEARNS
FIELD CARTOGRAPHER

APPROVED: M. FORTE
CIVIL ENGINEERING TECHNICIAN

APPROVED: P. BHADUR
LEAD CARTOGRAPHER

APPROVED: J. MRAZ
DEPUTY CHIEF OF SURVEY

DATE: 16 DECEMBER 2020

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

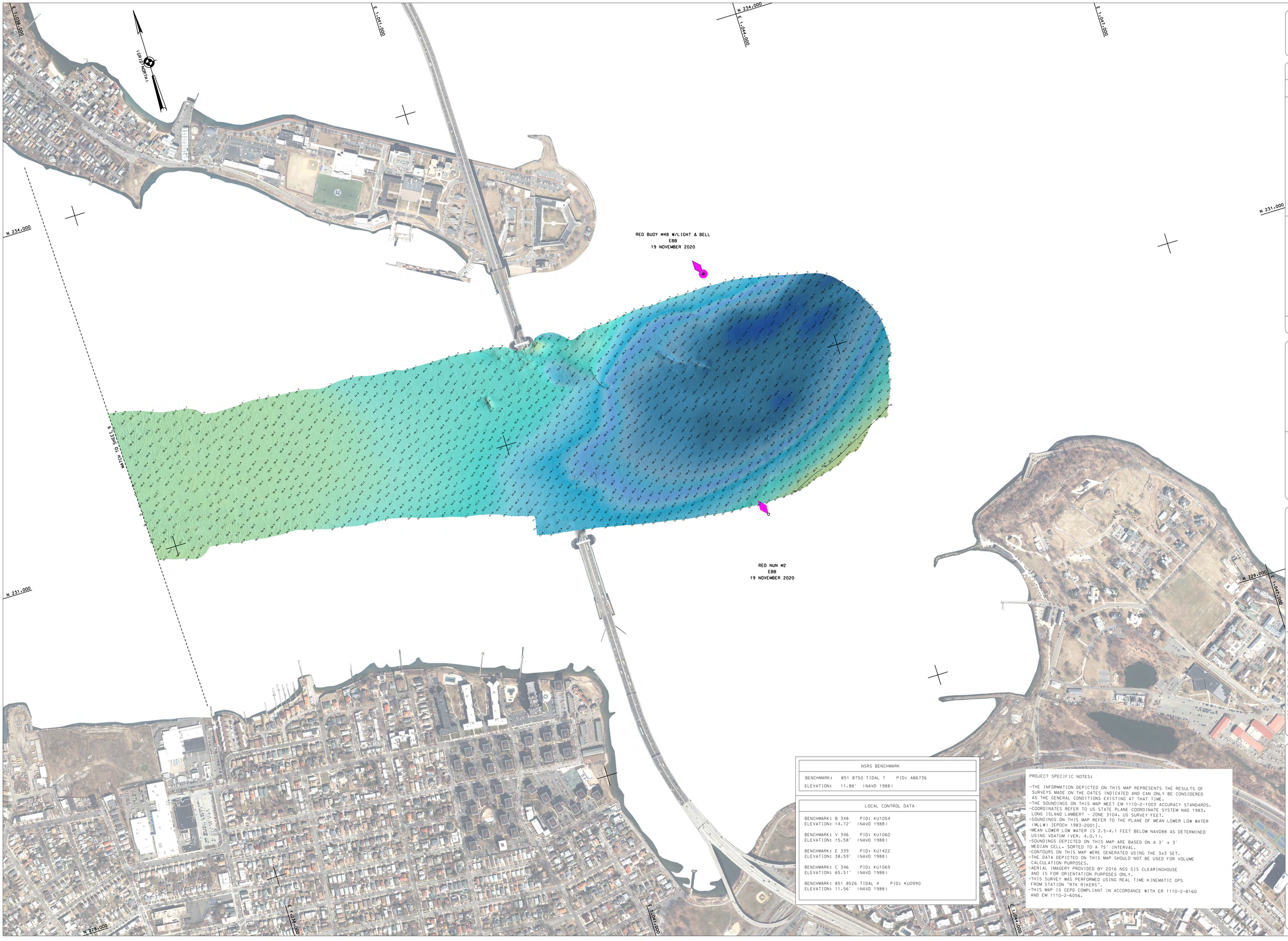
OPERATIONS DIVISION
SURVEY SECTION
CENAN-OP-S

EAST RIVER, NEW YORK
BATTERY TO
THROGS NECK BRIDGE
CONDITION SURVEY

VH-109

SHEET 9 OF 10

REQ NO./FILE NO.:5003



US ARMY CORPS
OF ENGINEERS
NEW YORK DISTRICT

	DS/CM	DS
PR		
WP		

DATES OF SURVEY:
4-19 NOVEMBER 2020

RED NO./FILE NO.:5003

SCALE:
ONE INCH = 300 FEET

FIELD BOOKS:
1647

APPROVED: P. J. KEARNS
CHIEF, SURVEY BRANCH

APPROVED: M. FORTE
CHIEF, ENGINEERING TECHNICIAN

APPROVED: P. J. BHABUR
CHIEF, SURVEY BRANCH

APPROVED: J. MOAZ
DEPUTY CHIEF OF SURVEY

DATE: 16 DECEMBER 2020

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT
CORPS OF ENGINEERS
NEW YORK, NEW YORK 10278

OPERATIONS DIVISION
SURVEY SECTION
CENAN-OPS-S

NSRS BENCHMARK	
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ELEVATION:	11.88' (NAVD 1988)

LOCAL CONTROL DATA	
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ELEVATION: 14.72'	(NAVD 1988)
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EAST RIVER, NEW YORK
BATTERY TO THROGS NECK BRIDGE
CONDITION SURVEY

VH-110

SHEET 10 OF 10